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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/829,386

04/22/2004

Jong-tae An

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11/26/2007

STAAS & HALSEY LLP

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EXAMINER

HEYI, HENOK G

ART UNIT

PAPER NUMBER

2627

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/829,386	<b>Applicant(s)</b> AN ET AL.	
	<b>Examiner</b> Henok G. Heyi	<b>Art Unit</b> 2627	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 September 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 1,3,5,11,13 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12 and 14-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

Applicant's amendment to the claims have been entered into the record.

### Response to

#### Argument

Applicant's argument on page 6, para 2 that states "Park at no point even mentions the terms "recess" or "recessed", nor does Park illustrate a recessed disc surface in Fig. 2B." is traversed. Even though, the terms "recess" or "recessed" are not found in the Park reference, figures 2B, 3B or 4B show recessed area for use of hindering generation and development of cracks. Fig. 4B shows taping member 17 that is placed on the recessed area in order to prevent generation and development of cracks near the center hole is level with the lead-in area of the recording area of the disc.

#### Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 21 and 22 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 12 and 13 of U.S. Patent No. 6,532,210. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in US patent 6,532,210 B2 are broader than those in the present application. The difference can be seen clearly in Table 1 below:

Present Application	US 6,532,210 B2
10/829,386	Park
An et al.	
21. An optical disc having a center hole, a clamping area adjacent to the center hole and a data area in which data is recorded, the optical disc comprising: at least one paper-like sheet attached to and surrounding the center hole to prevent generation and development of cracks in the optical disc.	12. A media disk, comprising: a non-recording surface portion disposed around a center hole of the disk; an information recording surface portion disposed around the non-recording surface portion; and a crack hindering element placed in the non-recording surface portion to hinder the generation of a crack at the center hole from advancing to an outer edge of the disk, with the crack hindering element including at least one annular taping member adhered to an area surrounding the center hole, the annular taping member being made of a material different from a material of the information recording surface portion.
22. The optical disc of claim 21, wherein	13. The media disk of claim 12, wherein

the paper-like sheet is made of paper.	the taping member is made of a fiber material having stability against shearing or breakage.
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***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 12 and 14-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Park US 6,532, 210.

Regarding claim 14, Park teaches an optical disc (see Figs. 4A, 4B) having a center hole (10a), the optical disc comprising: a material (17) attached to a surface of the optical disc in an area surrounding the center hole to prevent generation and development of cracks near the center hole (the taping member 17 not only hinders a crack generated in the inner circumference of the center hole 10a from advancing to the outer side of the disc-type recording medium, but also prevents shearing and breakage, col 5 line 3-7), the surface of the area surrounding the center hole to which the material

is attached being recessed such that a surface of the sheet is level with or lower than a surface of the disk where the material is not attached (see Fig 4B).

Regarding claim 12, Park teaches the optical disc of claim 14, wherein the material has an annular shape (a plurality of annular taping members 17 can be disposed around the center hole 10a, col 5 line 1-2).

Regarding claim 16, Park teaches the optical disc of claim 14, wherein the material is paper or other frictional flexible materials (fiber material having stability against shearing or breakage, col 4 line 60-65).

Regarding claim 17, Park teaches the optical disc of claim 16, wherein the material is attached to the surrounding the center hole using an adhesive or a double-sided tape (the annular taping member 17 may be adhered on the non-recording surface portion by an adhesive like bond, col 4 line 65-67).

Regarding claim 18, Park teaches the optical disc of claim 16, wherein the area to which the material is attached is recessed by a depth equal to or greater than a thickness of the material (see Fig. 4B).

Regarding claim 19, Park teaches the optical disc of claim 14, wherein the material does not protrude above a top surface of the optical disc (see fig 4B).

Regarding claim 20, Park teaches the optical disc of claim 18, wherein the material does not protrude above a top surface of the optical disc (see fig 4B).

Regarding claim 21, Park teaches an optical disc (10, Figs. 4A, 4B) having a center hole (10a), a clamping area (11) adjacent to the center hole and a data area (13) in which data is recorded, the optical disc comprising: at least one paper-like sheet attached to

and surrounding the center hole to prevent generation and development of cracks in the optical disc (the taping member 17 is preferably made of a material different from the non-recording surface portion 11, such as a fiber material having stability against shearing or breakage, col 4 line 61-64).

Regarding claim 22, Park teaches the optical disc of claim 21, wherein the paper-like sheet is made of paper (the taping member 17 is preferably made of a material different from the non-recording surface portion 11, such as a fiber material having stability against shearing or breakage, col 4 line 61-64).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Park.

Regarding claim 23, Park teaches the optical disc of claim 21, wherein the paper-like sheet which protrudes above the clamping area, but it doesn't explicitly teaches the

height of the paper-like sheet which protrudes above the clamping area, including a thickness of an adhesive applied thereto, may be no greater than 0.3mm. However, even in the absence of such a teaching, it would have been obvious for one of ordinary skill in the art based on common sense and common knowledge to select a thickness relative to the overall thickness of the disk minus the thickness of the clamping area such that the combined thickness of the clamping area, the paper-like sheet and adhesive should not be high enough to obstruct the disk rotation. Therefore, using the particular thickness of .3mm as claimed would have been an optimal design that was obvious to one of ordinary skill in the art.

***Allowable Subject Matter***

6. Claims 2, 4, 6, 7, 8, 9 and 10 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The cited prior art of record considered as a whole (either alone or in combination) fails to teach or suggest "an optical disc, for information recording and/or reproduction using light, having a center hole, the disc is divided into a clamping area adjacent to the center hole, a data area in which data is recorded, and a lead-in area between the clamping area and the data area, the optical disc comprising: at least one sheet is attached to the clamping area to prevent generation and development of cracks near the center hole, **the clamping area being recessed such that a surface of the sheet attached to the clamping area is level with or lower than a surface of the lead-in area.**"



7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

#### **Contact**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henok G. Heyi whose telephone number is (571) 270-1816. The examiner can normally be reached on Monday to Friday 8:30 to 6:00 EST.

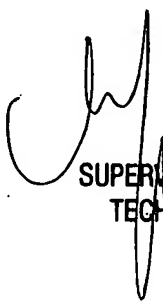
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Patent Examiner  
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